

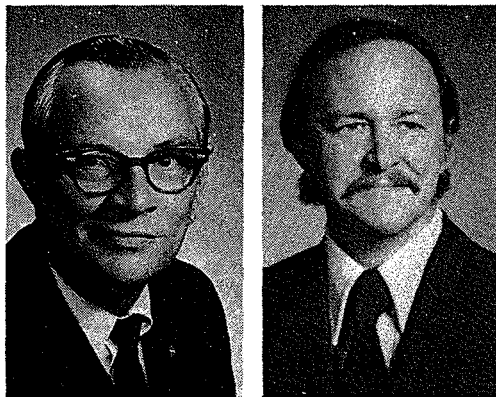
FINANCING OF A COLLEGE EDUCATION: THEORY VS. REALITY¹

By Joseph D. Boyd and Robert H. Fenske

With the possible exception of direct support to public and private higher education by the states, student financial aid is probably the dominant financial force affecting higher education today. The extent of the recent growth is so widely and publicly discussed that it need not be recounted here.

Pursuit of societal and governmental policies through need-based student financial aid, such as equal opportunity for higher education, access and choice of college, is dependent on an equitable and effective needs analysis system.

The advent of a system that was national in scope is fairly recent, and is commonly attributed to the establishment of the College Scholarship Service in 1954. Prior to this, need analysis systems were largely unique to each of the institutions that sought to provide scholarships and grants as an inducement for students to enroll in their college, or a means to keep needy students in college. Estimation of actual need of a student was necessarily idiosyncratic and varied widely from campus to campus. Establishment of the CSS was predicated on the agreement by many prestigious eastern colleges, and many others as well, that a common basis would be recognized for financial need and that the computation of such need would be delegated to an external agency. In the late 1960s, *the American College Testing Program*



Joseph Boyd is Executive Director of the Illinois State Scholarship Commission, Deerfield, Illinois. He has been awarded many honors including Doctor of Humane Letters from Augustana College in 1976.

Robert Fenske is Director of the Center for Study of Higher Education at Arizona State University, Tempe, Arizona.

¹The data presented in this article are based on a comprehensive final report to the Illinois State Scholarship Commission (*A Longitudinal Study of Illinois State Scholarship Commission Monetary Award Recipients, 1967-74*, June, 1975). Single copies are available upon request. The authors also wish to acknowledge the suggestions of Dr. Jonathan Fife drawn from the manuscript for his recent publication *Applying the Goals of Student Financial Aid* (ERIC/Higher Education Research Report No. 10, The American Association for Higher Education, Washington, D. C., 1975).

entered the field with an alternate system of needs analysis. Finally, the US Office of Education has established a third system to accommodate the entitlement program of Basic Grants.

Common to all of the nationally accepted need analysis systems are four assumptions:

1. Financing a college education is the primary responsibility of the individual and his family, not the responsibility of society. This concept is stated explicitly in the official *Handbook* for the 1975-76 Basic Educational Opportunity Grant Program. "The premise upon which all Federal Student Aid programs is based is that the primary responsibility for meeting the cost of postsecondary education is that of the student and his or her family. Therefore, an assessment must be made of the family's ability to meet these costs." (Page 12)
2. A need analysis system should not attempt to judge how much a family will pay but what a family can *afford* to pay; that is, the system must be concerned with the objective facts of family finances and not the family's financial practices. Obviously, this is a somewhat fine line to draw in many cases, and implies to many applicants at least the possibility of inequitable treatment between a frugal, saving family, and the improvident family.
3. The student as well as the family has the responsibility to help meet his or her educational expenses. The student's work for pay during his college career and his other assets must be considered in analyzing need. This assumption becomes particularly important for the student who feels a strong compulsion for financial independence from his family.
4. A financial need analysis system must consider more than just the family's gross income. The amount of family resources available should be divided among the family's college-going or eligible children. Resources, in order to define them equitably, must thus include consideration of the size of the family, the amount of expenses incurred in support of their children's college education, and the number of students already attending a postsecondary institution.

Implicit in all contemporary student financial aid assistance is the concept of "packaging" of aid from a variety of sources to meet the total financial need of students from a variety of sources. The National Task Force on Student Aid Problems in its final report strongly approved of this concept (see pages 68-77), and the Department of Health, Education and Welfare officially stated its endorsement of the concept: "In order to meet each student's need, the aid officer may develop a 'financial aid package' consisting of several types of assistance drawn from a variety of sources" (*HANDBOOK*, page 1-4).

The administration of student financial aid requires the packaging of various student aid resources to allow each applicant to meet college costs. The basic tool in developing a package is the use of a standardized instrument (an objective analysis of income/asset strength of the applicant and family) to determine a reasonable financial contribution expected as a measure of the

ability to pay for the costs. Does the aid administrator's package indicate how a given student will finally pay for all the costs? Do applicants and/or parents actually contribute the amount indicated by need analysis? Sometimes, yes. Often, no.

The theory of what is expected and the reality of what happens deserve frequent study and analysis by financial aid professionals.

Aid officers have historically been asked to make decisions with equity and fairness as to what should or could be done to meet costs. Parents and applicants, after knowing the exact amount of gift aid and/or educational loans available, make individual decisions as to how the costs will be met. Often, their subsequent actions differ from the aid package outlined to them. Although the aid officer does not often adjust the amount expected from parents according to willingness to pay, there does remain the frequent need to provide earning and/or additional loan opportunities to compensate for difference between the theoretical package of resources and the reality of the actual financial circumstances of the student.

The Study

Research results from an Illinois State Scholarship Commission (ISSC) replication study of 1967-68, 1970-71, and 1973-74 monetary award recipients do provide some findings on the topic of theory and reality in the financing of a college education.

The overall purpose of the series of three surveys of the Illinois State Scholarship Commission was to determine the present effectiveness and future direction of monetary award programs administered by the ISSC. Embodied in this general objective of all three surveys and the analysis of the findings are the following questions:

1. What effects do the programs of financial assistance and the level of funding have on (a) college attendance patterns among the various types of institutions (b) decision to attend and to remain in college (c) distribution of resources for college among gift aid, loans, self-help, and parents' contributions?
2. How do students really finance college costs, and how does reality compare with the theoretical expectations derived from the financial need analysis standardization formula?
3. How do students feel about various aspects of the monetary award programs?

This article focuses on the second of the above questions. The design of the study allowed determination of trends over time as revealed in the series of three surveys. The first survey included data gathered from monetary award recipients in the 1967-68 award year. A replication of the 1967-68 survey was conducted in the 1970-71 award year. With the addition of the 1973-74 survey conducted at an interval identical to that between the two earlier surveys, the longitudinal view of the aspects examined in these surveys extends from the 1967-68 academic year through the 1973-74 academic year.

In all three surveys, a random sample of 1,000 was drawn from the total number of scholarship recipients during the academic year. A random sample of 1,000 was also drawn from the grant award recipients in the 1967-68 and the 1970-71 surveys. The sample was increased to 2,000 grant recipients during the 1973-74 survey due to the large increase in the number of grant recipients. Thus, the finite study population of scholarship and grant recipients, respectively, was 9,297 and 6,586 in 1967-68; 14,292 and 34,077 in 1970-71; and 13,488 and 58,956 in 1973-74.

A specially designed questionnaire was administered, without follow-up, to the sampled recipients. The respondents were guaranteed anonymity. The overall response rate (scholarship and grant samples combined) was 69.3% for the initial survey, 64.7% for the second survey, and 58.4% for the last survey.

This study consistently differentiates for evaluation and analysis two types of monetary award recipients, namely, those receiving scholarships and those receiving grants. All references to *scholarship recipients* designate monetary award recipients who are also named *state scholars* by the ISSC. A state scholar demonstrates high academic potential on the basis of academic ability test scores and academic record achieved in high school. The term *grant recipients* refers to monetary award recipients who either did not ask to be considered for state scholar recognition or did not qualify for this program of recognition for high academic potential as determined by the Illinois State Scholarship Commission.

All monetary award recipients must demonstrate the need for financial aid to attend the Illinois college of their choice. The distinction between scholarship recipients (high ability students) and grant recipients (typically average ability students) enables Illinois and other states to observe significant differences in the major variables of this study — characteristics of award winners, program impact on access and/or choice, how students finance their education, a comparison of theory and reality of contributions to meet college costs — by ability levels.

In the analysis of the ability of the applicant/parent(s) to meet college costs and the amount of dollars actually contributed, the following background information is essential:

Illinois State Scholarship Commission monetary awards are based upon a confidential review of the ability of the family and/or applicant to pay for college costs. The theoretical ability is derived from a quantitative measurement of the family's and/or applicant's financial resources and a normative expectation of the ability to pay. It is assumed that the family is able to commit a reasonable portion of its resources for the son's or daughter's college costs; similarly, it is assumed that the college student is both willing and able to provide needed self-help such as part-time employment. For example, included in the calculated financial need based on resources and anticipated costs is a theoretical expectation of self-help from each applicant. For all three academic years reviewed in this study, self-help has been calculated as one-fourth of the college cost budget of the applicant's choice.

This amount of self-help arbitrarily expected from each applicant was never less than \$500 nor more than \$1,000 during this period. Once the financial strength of the family had been added to the arbitrary expectation of self-help from the applicant, a subtraction was made from an established college cost budget, and any remainder shown was considered the true need of the applicant and was used to determine the amount of the ISSC award.

The Findings

The rationale of need analysis is under constant review. The basic questions remain — should the formulas reflect how students actually *do* finance their college costs? The reasonable sacrifice of a portion of parental financial resources, if and when available for college costs, is the historical rationale for objective need analysis.

Many financial aid officers have been aware for some time that actual parental financial support fell short of the reasonable expectation derived through the currently used formulas. Table I displays data demonstrating these trends in Illinois. Students have been required to replace the dollars not being provided by parents with increased self-help in the form of earnings and/or loans.

TABLE I
Expected and Actual Contributions from
Parents' Income and Assets to Meet College Costs
(Random Samples of 1967-68, 1970-71, and 1973-74 Monetary Winners)

	#	Expectation Theory	Reality	Percent Reality/ Expectation
<i>High Ability Students</i>				
April '68	751	\$ 686	\$460	67.1
April '71	707	\$ 784	\$412	52.6
April '74	711	\$1,150	\$487	42.3
<i>Average Students</i>				
April '68	626	\$ 608	\$315	51.8
April '71	587	\$ 542	\$243	44.8
April '74	1,042	\$ 730	\$231	31.6

Figure I
TRENDS IN HOW STUDENTS FINANCE COLLEGE COSTS

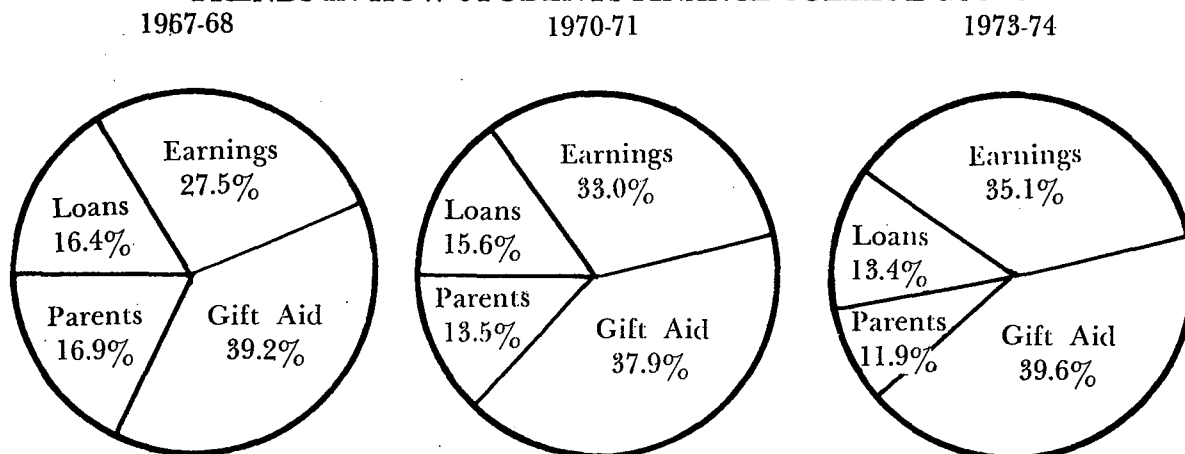


Figure I depicts how all students actually "packaged" their resources to meet college costs. In 1967-68 it can be observed that self-help, evidenced by both earnings and loans, was approximately 44 percent of the budget. By 1970-71 this increased to 48.6%, and in 1973-74 the percentage of total self-help was 48.5%. It is of interest to note that gift aid represented a relatively uniform 37.9% and 39.5% of the budget over each of the three years studied. The 1973-74 increase in reported "other scholarships" is no doubt a reflection of the impact of the new Basic Educational Opportunity Grant (BEOG) in providing other aid which was not available in previous years.²

Although the typical ISSC monetary award winner continues to borrow approximately \$400 a year, the percentage that this amount represents in his budget has dropped by about 3% in the six-year period studied. Self-help in the form of earnings results from a dramatically different mix of term-time vs. summer earnings over the six year period encompassed by the studies. Students working while in school (term-time) were able to provide \$537 in 1973-74 toward their budget, while in 1967-68 this was \$180. This is about a three-fold increase of earnings from term-time employment and a doubling of the percentage of the total college cost budget represented by such earnings. In contrast, earnings from summer work remain at about the level of \$470 on the average and therefore were a decreasing percentage of the total college cost budget. It can be inferred that a sizeably greater number of students were enrolled in summer sessions in 1973-74 compared with 1967-68.

The parental contributions decreased substantially from 17% of the total budget to about 12% of the total budget, represented by a decrease in actual dollars received by about \$50 over the six-year period. For the 1973-74 recipients of the ISSC monetary awards, it can be generalized that approximately 40% of their college costs are met through nonrepayable gift aid, about 48% through self-help in the form of earnings and loans, and approximately 12% from parents.

Summarization of Findings

1. Off all the variables, term-time earnings have increased most, and the change is the most noteworthy since 1967-68. These increases have raised term-time earnings to 1/5th of the budget and are being used as a substitute for the parental dollar contributions in meeting college costs.

²The BEOG is a federal program of grant aid. Beginning in 1973-74, full-time undergraduates attending either traditional or specialized schools in any state could apply for assistance if they had not attended any postsecondary institutions before April, 1973. Based upon a rigid federally determined measure of financial strength, all eligible applicants are entitled to the assistance if they enroll at one of almost 5,000 eligible institutions. The enabling law permits aid up to \$1,400 per year not to exceed 1/2 of the total college cost budget. However, limited funds have not permitted maximum awards in either 1973-74 or 1974-75. Discussions in Congress indicate that there is considerable support for allocating increased funds to this program in the ensuing fiscal year. The BEOG is to be a minimum or "floor" upon which other sources of financial aid are to be used as needed.

2. Parents are providing less, in real dollars and as a percentage, in terms of dollars given and theoretically expected to help their child meet college costs. When a trend analysis was made of all respondents to the series of three studies, the figures showed in 1967-68 about 60% of the expectation from parental income assets was provided. In 1970-71 this percentage dropped to 51%, and a further decline to 39% was observed in 1973-74. For high academic potential students (ISSC monetary award winners also named state scholars), the percentages of reality to theory have dropped from 67% in 1967-68 to 54% in 1970-71, and to 43% in 1973-74. For average ability (grant) students the comparable percentages are 52% in 1967-68, 47% in 1970-71, and 33% in 1973-74.
3. Summer earnings have remained fairly constant in net dollars and as a percentage of the resources over the past six years.
4. The role of student educational loans has also been static or slightly down in mean dollars borrowed or as a percentage of the college budget over the past six years. Loans are probably being used by most students as the last resource to use when necessity requires they be used.

The data of this study suggest that the desire of many 18 to 22 year-olds still being claimed as tax dependents by parents is to gain financial independence. The dramatic increases in term-time earnings, in many cases, could be an attempt by many students to expect only those dollars from parents to meet college costs after the students have done all they could on their own.

In effect, it appears more students are saying to parents "don't provide all that you could give me to meet costs, but rather provide only what is required after I earn and/or borrow to the maximum of all that is available to me." Obviously, this is an attitude toward financial/parental emancipation which must be understood by financial aid officers. It is unfair to assume that for all students the above is applicable; clearly, there are parents who for one reason or another refuse to fulfill even minimal obligations of support for college costs. Parents' refusal to provide what dollars are theoretically available continues to require thousands of students to borrow or work excessive hours to provide the dollars to meet college costs.

Term-time earnings have dramatically increased in the past six years. Hours worked and pay per hour have increased to a level where it can be estimated that this variable is now about \$580 above the theoretical expectation. By design or by necessity, this source has replaced the expected dollars not being provided by parents in the theoretical packaging of all aid resources.

If this trend is to continue, sufficient college work-study funds must be available, and jobs must also be available to students seeking them. The interrelationship between the demands of the classroom and remaining in good academic standing and the time given to jobs for earnings cannot be ignored. The concurrent de-emphasis of academic probationary or dis-

missal decisions as well as increases in mean grade-point averages have seemed to permit more time for work to earn dollars and less time required to obtain the grades or credits needed to remain in school or graduate.

It can be implied that the availability of jobs and funds to pay for term-time work remain as most important variables. Additional research is needed to indicate further if parents, on the average, are responding in terms of providing dollars needed to cover a deficit in meeting college costs or whether their response is a reasonable sacrifice of their resources.

Conclusion

Many financial aid officers have been aware for some time that actual parental support fell short of the reasonable expectation derived through the currently used formulas. Students have been required to replace the dollars not being provided by parents with increased self-help in the form of earnings and/or loans. The increasing availability of student loans has no doubt also contributed to the fact that many parents are not providing from their income and/or assets the dollars that are theoretically available for college costs. Such parents, by design, obtained the loan funds or had the student borrow to replace the dollars they could have provided.

This longitudinal study has clearly indicated that changes over time require continual evaluation in both how students are financing their education and the impact of certain forms of student aid on both access to and choice of institutions. The new and significant desire for youth in their late teens or early twenties to have financial independence from their parents is observed in the 1973-74 survey findings to a degree not found in the 1967-68 survey.

The art and science of the financial aid administrator must constantly be tested against the reality of the responses of families and applicants to the meeting of college costs. This research has attempted to meet this challenge and responsibility.

Professional aid administrators must continue to establish reasonable standards of parental expectations to help meet college costs. To do otherwise would bring decisions of inequity based upon a willingness designed solely to gain dollars and not representing reasonable sacrifice.

Aid packages that include self-help in loans, term-time earnings, summer work and/or part savings must more often deal in gross totals with the realization that a variety of circumstances will cause each applicant to use these resources in a combination quite different than the original package may have suggested. Decisions made as regards gift aid have one set of assumptions and how a student meets the remaining need should have a totally different set of assumptions.

The theory and reality of how one finances a college education is obviously a continually changing reality and is influenced by available grant dollars, loans and work opportunities. The variables of parental attitudes to contribute from their resources as well as the dependent student's desire to be financially self-supporting also significantly impacted theory/reality findings.

REFERENCES

Department of Health, Education, and Welfare, *Handbook, Basic Educational Opportunity Grant Program*, 1975-76. Washington, D. C.: Office of Education, Bureau of Postsecondary Research, 1975.

National Task Force on Student Aid Problems, *Final Report*. Brookdale, Calif. 1975.